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(71) Applicant (for all designated States except US):  
**SAMSHIN CREATION CO., LTD. [KR/KR]; 31-28**  
**Cheongdam2-dong, Gangnam-gu, Seoul 135-950 (KR).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHUN, Suk-Won**  
**[KR/KR]; 106-307 Saetbyeolmaeul Life Apt., Bun-**  
**dang-dong, Bundang-gu, Seongnam-si, Gyeonggi-do**  
**463-748 (KR). PARK, Jong-Su [KR/KR]; 108-1303**  
**Hansin Apt., Cheongnyangni 1-dong, Dongdaemun-gu,**

**Seoul 130-775 (KR). JO, Seong-Mu [KR/KR]; 201-308**  
**Anam Apt., Myeongnyun-dong 2-ga, Jongno-gu, Seoul**  
**110-767 (KR). LEE, Hwa-Seop [KR/KR]; 103-601**  
**Samsung Cheongdam Gongwon Apt., Cheongdam-dong,**  
**Gangnam-gu, Seoul 135-952 (KR).**

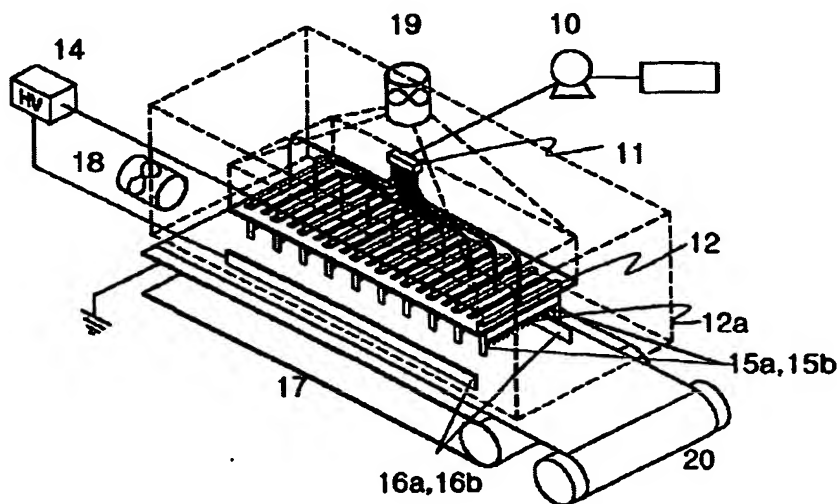
(74) Agents: **LEE, Sang-Yong et al.; 4F., Byukcheon Bldg.,**  
**1597-5 Seocho-dong, Seocho-gu, Seoul 137-876 (KR).**

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(54) Title: **A COMPLEX MEMBRANE FOR ELECTROCHEMICAL DEVICE, MANUFACTURING METHOD AND ELEC-**  
**TROCHEMICAL DEVICE HAVING THE SAME**



(57) Abstract: A complex membrane for an electrochemical device such as a lithium secondary battery, its manufacturing method, and an electrochemical device having the complex membrane are disclosed. The complex membrane includes a micro-porous polyolefin membrane, and a web-phase porous membrane united to at least one side of the micro-porous polyolefin membrane and composed of nano-fibers. Since the complex membrane is capable of absorbing an electrolyte uniformly, it greatly improves performance of a battery when being used for an electrochemical device. In addition, owing to excellent mechanical strength and good binding capacity to an electrode, it helps to increase a process rate for manufacturing the battery.